PR. 1806

PATENT DOCKET 709

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Paul J. Carter et al.

Serial No. 07/715,272

Filed: 14 June 1991

For: Immunoglobulin Variants

Group Art Unit: 1806

#16

Examiner: L. Feisee

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Amendment and Response

Honorable Commissioner of Patents
and Trademarks
Washington, D.C. 20231

Sir:

Responsive to the Office Action mailed 5 October 1992, please amend the claims as follows:

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1. (Amended) A method for making at least a portion of a humanized antibody variable domain comprising amino acid sequence of a non-human[, import] antibody which is desired to be humanized (import antibody) and a human antibody, comprising the steps of:

a. obtaining the amino acid sequences of [at least a portion of] an import variable domain and of a consensus human variable domain;

b. identifying Complementarity-Determining Region (CDR) amino acid sequences in the import and the human amino variable domain sequences;

c. substituting an import CDR amino acid sequence for the corresponding human CDR amino acid sequence;

d. aligning the amino acid sequences of a Framework Region (FR) of the import antibody and the corresponding FR of the consensus antibody;

e. identifying import antibody FR residues in the aligned FR sequences that are non-homologous to the corresponding consensus antibody residues;

f. determining if the non-homologous import amino acid residue is reasonably expected to have at least one of the following effects:

1. non-covalently binds antigen directly,